



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/365,678	08/02/1999	ESHWAR PITTAMPALLI	CASE-11	2090

7590 07/31/2006  
HARNES, DICKEY & PIERCE, P.L.C.  
P.O. BOX 8910  
RESTON, VA 20195

EXAMINER

SMITH, SHEILA B

ART UNIT PAPER NUMBER

2617

DATE MAILED: 07/31/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/365,678

Applicant(s)

PITTAMPALLI, ESHWAR

Examiner

Sheila B. Smith

Art Unit

2617

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on 12 May 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) 11-17 is/are allowed.
- 6) ☐ Claim(s) 1-10, 18, 19 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 1-10, 18, 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stewart (U.S. Patent Number 5,633,888) in view of Lee et al. (U.S. Patent Number 5,649,000).

**Regarding claims 1, 2**, Stewart discloses essentially all the claimed invention as set forth in the instant application, further Stewart discloses a method of using a access point adjacency matrix to establish handoff in a wireless LAN, in addition Stewart discloses a unregistering (which reads on determining that the signal strength from the current access point is below a predetermine threshold level) at a controller (access point) a dependent (mobile unit) in communication with a master device (LAN network) using a communication channel on a frequency band  $f_{\text{band}}$  (1) (which reads on column 1 lines 37-47), transmitting a message (which reads on time mark frame) to the dependent indicating to the dependent to register with a communications network using a frequency band as disclosed in column 10 lines 10-15 and in column 10 lines 28-41. However, Stewart fails to specifically disclose the use of a frequency band  $f_{\text{band}}$  (2).

In the same field of endeavor, Lee et al. further discloses a method and system for providing a different frequency handoff in a CDMA cellular telephone system. In addition Lee et al. discloses the use of a frequency band  $f_{\text{band}}$  (2) which reads on column 7 lines 45-53.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to improve Stewart by modifying a method of using a access point adjacency matrix to establish handoff in a wireless LAN with a frequency band  $f_{\text{band}}$  (2) as taught by Lee et al. for the purpose of ensuring a smooth handoff.

**Regarding claim 3**, Stewart in view of Lee at al. discloses everything claimed, ms applied above (see claim 1) additionally, Stewart discloses transmitting another message indicating to the communications network to register the dependent ms disclosed in column 10 lines 10-15.

**Regarding claims 4,5**, Stewart in view of Lee at al. discloses everything claimed, as applied above (see claim 1) additionally, Stewart discloses dependent is unregistered when a strength if a signal is transmitted as disclosed in column 10 lines 10-15.

**Regarding claim 6**, Stewart in view of Lee at al. discloses everything claimed, as applied above (see claim 5) additionally, Stewart discloses monitoring a communication channel associated with the master device in column 10 lines 10-15.

**Regarding claim 7**, Stewart in view of Lee at al. discloses everything claimed, as applied above (see claim 1) additionally, Stewart discloses a communication channel as disclosed in column 3 lines 40-45.

Art Unit: 2617

**Regarding claim 8**, Stewart in view of Lee at al. discloses everything claimed, as applied above (see claim 1) additionally, Stewart discloses transmitting using a frequency band  $f_{\text{band}}$  in column 3 lines 5-11.

**Regarding claim 9,10**, Stewart in view of Lee at al. discloses everything claimed, as applied above (see claim 1) additionally, Stewart discloses transmitting a handoff message to the communications network indicating to the communications network to communicate directly with the dependent (which reads on column 3 lines 5-11).

**Regarding claim 18**, Stewart in view of Lee at al. discloses everything claimed, as applied above (see claim 1) additionally, Stewart discloses receiving a first registration message at a master device from a dependent over a first frequency hopping sequence associated with the master device (which reads on column 10 lines 28-41), transmitting a second registration message over a second frequency hopping sequence associated with a second master device (which reads on column 10 lines 21-27), monitoring a strength at the master device for a signal transmitted by the dependent over the first frequency hopping sequence (which reads on column 10 lines 42-47), and transmitting an unregistration message over the second frequency hopping sequence if the strength of the signal transmitted over the first frequency hopping sequence falls below a threshold value (which reads on column 10 lines 28-41).

**Regarding claim 19**, Stewart in view of Lee at al. discloses everything claimed, as applied above (see claim 1) additionally, Stewart discloses a communication channel as disclosed in column 3 lines 40-45.

***Allowable Subject Matter***

2. Claims 11-17 are allowed.

***Response to Arguments***

3. Applicant's arguments filed 5/12/06 have been fully considered but they are not persuasive.

Regarding applicants arguments that the examiner has ignored the limitation “transmitting a message to the dependent”, the examiner disagrees. Since the applicant did not specify a specific message that contains specific information the examiner contends that the use of a “time mark” reads on is a message or signal or communication of sort which reads on the broadly claimed message, to further point out and make clear the examiner directs the applicant attention to paragraph 1 lines 65-67.

Regarding applicants arguments that the examiner has ignored the limitation “the message indicating (to the dependent) to register with a communication network”, again the examiner disagrees. As stated in paragraph 10 lines 28-41 “the mobile device determines if a time mark frame is received. If so, the mobile device establishes communication with the new

Art Unit: 2617

access point in accordance with the hopping scheme” the examiner contends that it adequately meets the claimed limitation.

Regarding applicants argument that the examiner has ignored the limitation “such registration to be done using a frequency band  $f_{\text{band}}(2)$ ”, once again the examiner disagrees. The examiner contends that Stewart fails to specifically disclose the use of a frequency band  $f_{\text{band}}(2)$ .

In the same field of endeavor, Lee et al. further discloses a method and system for providing a different frequency handoff in a CDMA cellular telephone system. In addition Lee et al. discloses the use of a frequency band  $f_{\text{band}}(2)$  which reads on column 7 lines 45-53.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to improve Stewart by modifying a method of using a access point adjacency matrix to establish handoff in a wireless LAN with a frequency band  $f_{\text{band}}(2)$  as taught by Lee et al. for the purpose of ensuring a smooth handoff.

The examiner restates and standby the above rejection.

### ***Conclusion***

4. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after

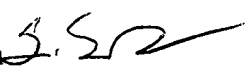
Art Unit: 2617

the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sheila B. Smith whose telephone number is (571)272-7847. The examiner can normally be reached on Monday-Thursday 6:00 am - 3:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Feild can be reached on 571-272-4090. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

S. Smith   
July 19, 2006

  
JOSEPH FEILD  
SUPERVISORY PATENT EXAMINER